Reformed Functional Skills Maths

Diagnostic Assessment

Level 1

Name:_____

Course:_____

Attempt all questions – 1 hour 15 mins. Please write on the paper.

1) Put the following numbers in ascending order: 1542, 10325, 8486, 100002, 9497

1 mark

2) Work out **-**12 + 15

1 mark

3) Work out 2.3 x 1000

1 mark

4) If 27 x 14 = 378, which of these is also correct? Please tick (☑) the appropriate answer.

a) 378 ÷ 14 = 27	☐	c)14 ÷ 378 = 27	☐
b) 27 ÷ 378 = 14	☐	d) 378 ÷ 24 = 17	☐

1 mark

5) If you **subtract** your age from 220 you get your maximum heart beat.
If your age is 18, work out your maximum heartbeat.

1 mark

6) Calculate 15^2

1 mark

7) Work out 4 + 8 x 2

1 mark

8) Find the missing number

$5\frac{2}{3}$ is the same as $\frac{?}{3}$

1 mark

9) Work out $\frac{1}{5}$ of 35

1 mark

10) Put the following numbers in order from lowest to highest, 3.44, 4.2, 3.7, 3.287

1 mark

11) Work out 14.32 + 15.69

1 mark

12) Round 12.73 to the nearest whole number

1 mark

13) Which is larger a) 20% of £30 or b)30% of £15? Please explain your answer.

2 marks

14) Work out 60% of 300

1 mark

15) Estimate $\frac{3}{7}$ of £6902. Show your workings.

a) £2958	c) £3500
b) £3000	d) £4000

1 mark

16) Which is the largest a) 46%, b) $\frac{15}{30}$, c) 0.6? Please explain your answer.

2 marks

17) Divide £400 in the ratio 3:5

2 marks

18) A loan of £2000 is charged at 15% interest. How much has to be repaid in total?

2 marks

19) A shop has a 20% off sale. What is the sale price of a coat which originally cost £70?

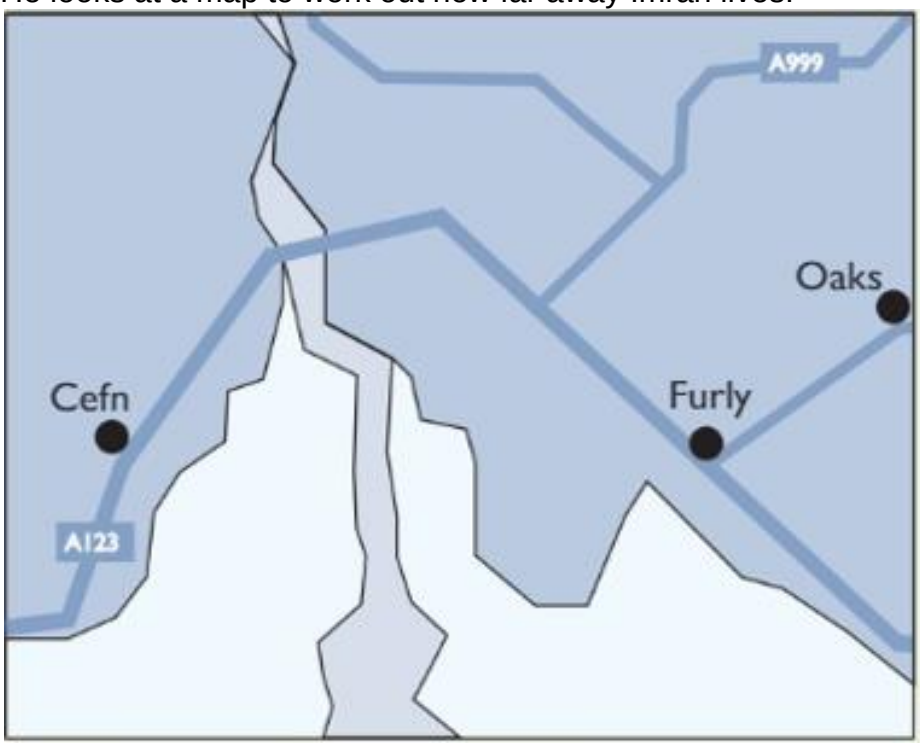
2 marks

20) Convert 2m to cm

2 marks

21) Simon lives in Oaks. He is going to visit his friend Imran in Furly.

He looks at a map to work out how far away Imran lives.

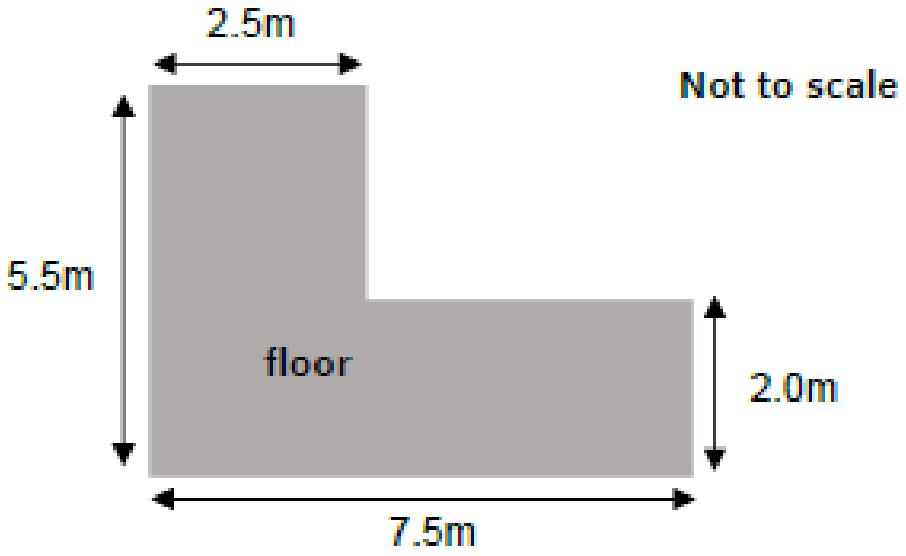


Scale: 1 cm = 4 miles

How many miles will he have to travel to get to Imran's by road? Please show your working.

2 marks

22) Work out the perimeter of the following shape.



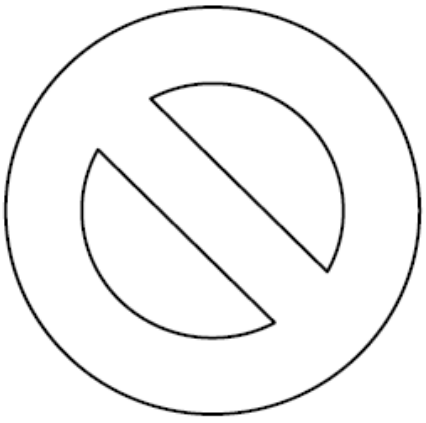
2 marks

23) Work out the volume of a cube with sides of 4cm

2 marks

24)

Draw **all** the lines of symmetry on this shape.



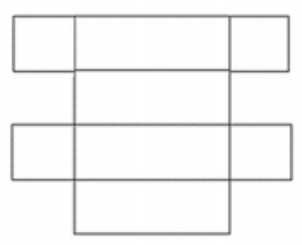
1 mark

25)

Which one of these nets will fold to make a cube?

(tick one box)

A



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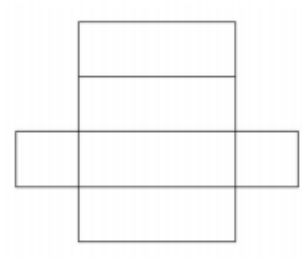
B



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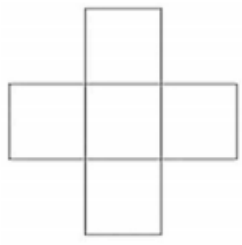
C



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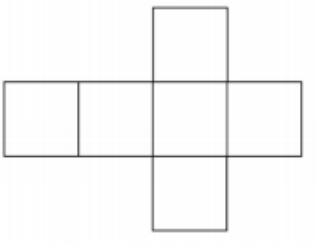
D



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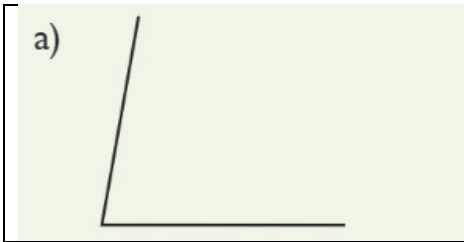
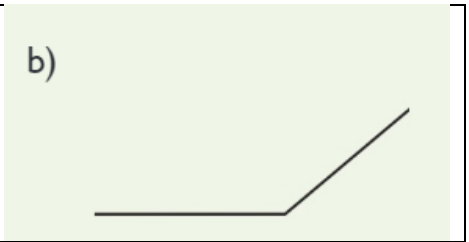
(1 mark)

26) Measure the angles between the lines below using a protractor. Write the size of the angle (in degrees) and state whether it is acute, obtuse, reflex or a right angle.

a) 	b) 
Measurement:_____°	Measurement:_____°
Type of angle:_____	Type of angle:_____

3 marks

27)

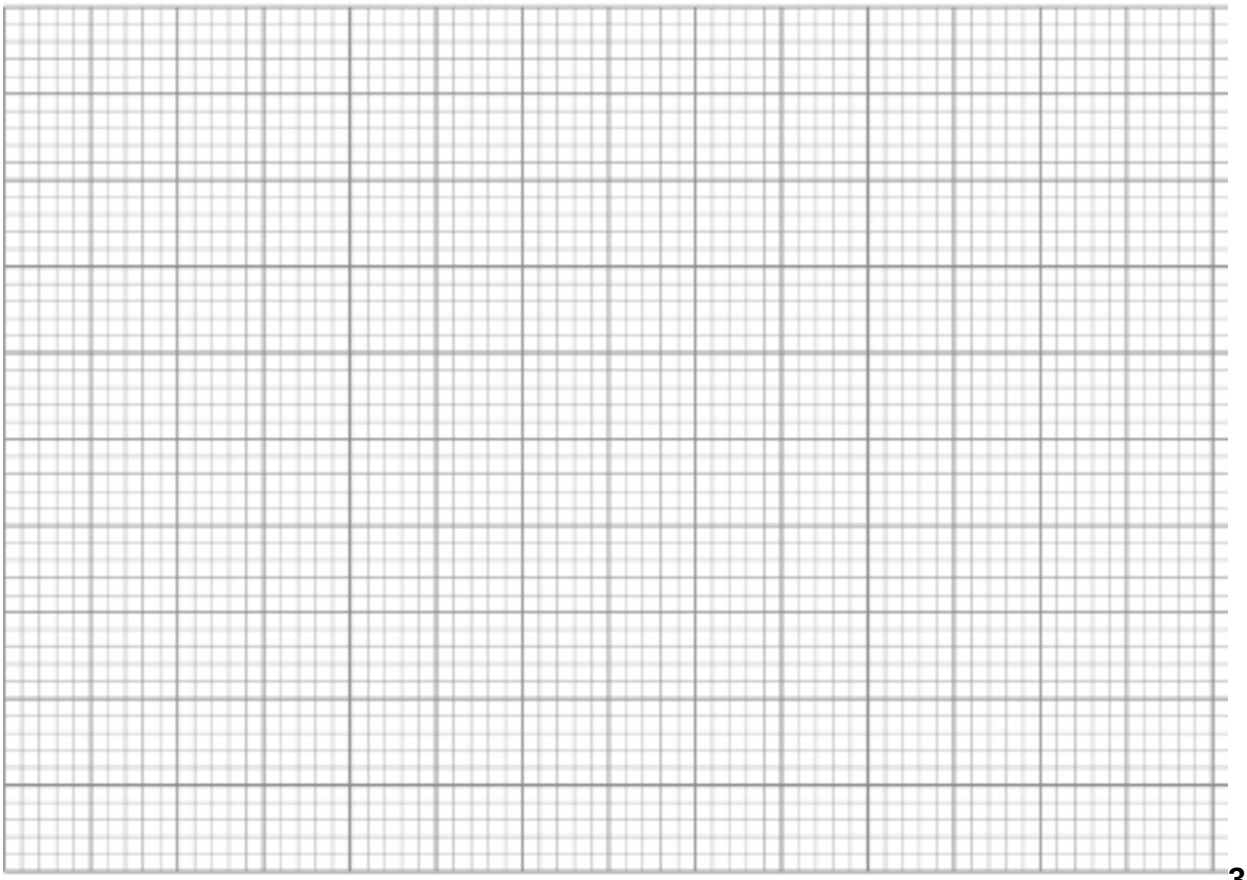
Rory works for a restaurant.

One week, the restaurant runs a special offer from Wednesday to Saturday.

The table shows the income from sales of drinks for the four days.

	Income from drinks
Wednesday	£800
Thursday	£1000
Friday	£1400
Saturday	£700

On the grid below, draw a suitable chart showing the income from drinks.



3 marks

28) A group of children were asked

"How old were you when you got your first mobile phone?"

Here are the results in years.

7	3	4	11	10	9	7	9	4	10
8	11	10	6	11	7	5	6	7	4

(a) Complete the tally chart.

Age (years)	**Tally**
Under 5	
5 to 7	
8 to 11	

2 marks

29) Find the mean and the range of the numbers 3, 10, 27, 8. Please show your workings.

Mean:_____Range:_____

2 marks

30)

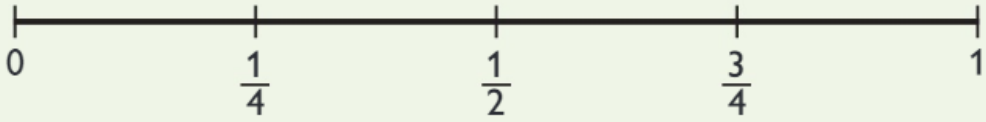
Gavin has 4 pairs of socks – 3 red pairs and 1 black pair.

This morning, he picked a pair of socks to wear without looking.

A) Describe the chance of Gavin picking a red pair.

_____

B) Draw an arrow on the scale below to show the probability of this outcome.



2 marks

31) What is the probability of randomly choosing apple from a selection of 3 apples, 2 bananas and 5 oranges? Please give your answer as a fraction.

1 mark